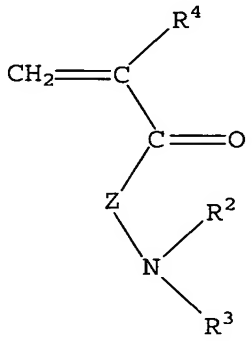
We claim:

1. A coating composition comprising:

a) a polymer comprising one or more (meth)acrylate monomers and one or more aminoalkyl(meth) acrylate monomers described by the structure:



where Z is a divalent linking group; R^2 and R^3 are independently selected from H or C_1-C_6 linear or branched aliphatic; and R^4 is H or CH_3;

b) a fluorocarbon polymer; and

c) a solvent.

2. The coating composition of claim 1, wherein Z is selected from $-O-R^1-$ and $-N(R^5)-R^1-$, wherein R^5 is H or C_1-C_6 linear or branched aliphatic, and R^1 is selected from the group consisting of or C_1-C_{20} linear or branched aliphatic, aryl, alkylaryl, ethoxylated alkyl, ethoxylated aryl, ethoxylated alkylaryl, propoxylated alkyl, propoxylated aryl, and propoxylated alkylaryl.

3. The coating composition of claim 1, wherein the polymer (a) is a thermoplastic resin.

4. The coating composition of claim 1, wherein the polymer (a) comprises 1 percent to 70 percent by weight of the resin solids portion of the coating composition.

5. The coating composition of claim 1, wherein the weight-average molecular weight of the polymer (a) is less

than 25,000, as determined by gel permeation chromatography using polystyrene standards.

6. The coating composition of claim 1, wherein the weight-average molecular weight of the polymer (a) is from 7,000 to 20,000, as determined by gel permeation chromatography using polystyrene standards.

7. The coating composition of claim 1, wherein the fluorocarbon polymer is one or more selected from the group consisting of poly(vinylidene fluoride), poly(vinyl fluoride), poly(chlorotrifluoroethylene), poly(tetrafluoroethylene), and poly(trifluoroethylene).

8. The coating composition of claim 1, wherein the weight average molecular weight of the fluorocarbon polymer as determined by gel permeation chromatography using polystyrene standards is from 100,000 to 500,000.

9. The coating composition of claim 1, wherein the polymer of (a) and the solvent (c) constitute a continuous phase and the fluorocarbon polymer constitutes a dispersed phase.

10. The coating composition of claim 9, wherein the fluorocarbon polymer is in the form of solid dispersible particles.

11. The coating composition of claim 10, wherein the particle size of the dispersible fluorocarbon polymer particles is 0.1 to 5.0 microns.

12. The coating composition of claim 1, wherein the fluorocarbon polymer comprises 30 to 99 percent by weight of the resin solids portion of the coating composition.

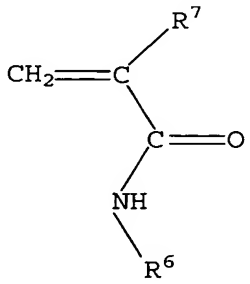
13. The coating composition of claim 1, wherein the solvent component is selected from the group consisting of aliphatic hydrocarbons, aromatic hydrocarbons, ketones, esters, glycols, ethers, ether-esters, glycol ethers, glycol ether-esters, alcohols, ether-alcohols, phthalate plasticizers, and mixtures thereof.

14. The coating composition of claim 1, wherein the (meth)acrylate monomers are one or more selected from the group consisting of methyl(meth)acrylate, n-butyl(meth)acrylate, t-butyl(meth)acrylate, and ethyl(meth)acrylate.

15. The coating composition of claim 1, wherein the aminoalkyl(meth)acrylate monomer is an N-t-butyl, aminoalkyl (meth)acrylate.

16. The coating composition of claim 1, wherein the aminoalkyl(meth)acrylate monomer is t-butylaminoethyl methacrylate.

17. The coating composition of claim 1, wherein the polymer (a) comprises one or more additional monomers having the structure:



wherein R^7 is H or CH_3 and R^6 is $-CH_2-OH$ or $-CH_2-O-R^{10}$, where R^{10} is C_1-C_6 linear or branched aliphatic.

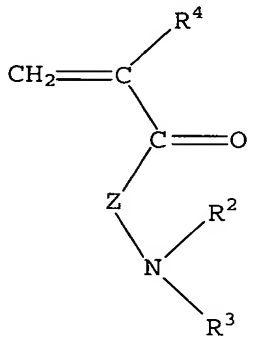
18. The coating composition of claim 17 wherein the additional monomers include one or more selected from the group consisting of N-butoxymethylol acrylamide, N-

butoxymethylol methacrylamide, N-methylol acrylamide, and N-methylol methacrylamide.

19. A coating composition comprising:

a) a continuous phase comprising:

(i) a polymer comprising one or more (meth)acrylate monomers and one or more aminoalkyl(meth) acrylate monomers described by the structure:



where Z is a divalent linking group; R^2 and R^3 are independently selected from H or C_1-C_6 linear or branched aliphatic; and R^4 is H or CH_3; and

(ii) a solvent; and

b) a dispersed phase comprising solid dispersible particles of a fluorocarbon polymer.

20. The coating composition of claim 19, wherein Z is selected from -O-R^1- and -N(R^5)-R^1-, wherein R^5 is H or C_1-C_6 linear or branched aliphatic, and R^1 is selected from the group consisting of or C_1-C_{20} linear or branched aliphatic, aryl, alkylaryl, ethoxylated alkyl, ethoxylated aryl, ethoxylated alkylaryl, propoxylated alkyl, propoxylated aryl, and propoxylated alkylaryl.

21. The coating composition of claim 19, wherein the polymer (a) is a thermoplastic resin.

22. The coating composition of claim 19, wherein the polymer (a) comprises 1 percent to 70 percent by weight of the resin solids portion of the coating composition.

23. The coating composition of claim 19, wherein the weight-average molecular weight of the thermoplastic resin is less than 25,000, as determined by gel permeation chromatography using polystyrene standards.

24. The coating composition of claim 19, wherein the weight-average molecular weight of the thermoplastic resin is from 7,000 to 20,000, as determined by gel permeation chromatography using polystyrene standards.

25. The coating composition of claim 19, wherein the fluorocarbon polymer is one or more selected from the group consisting of poly(vinylidene fluoride), poly(vinyl fluoride), poly(chlorotrifluoroethylene), poly(tetrafluoroethylene), and poly(trifluoroethylene).

26. The coating composition of claim 19, wherein the weight average molecular weight of the fluorocarbon polymer as determined by gel permeation chromatography using polystyrene standards is from 100,000 to 500,000.

27. The coating composition of claim 26, wherein the particle size of the dispersible fluorocarbon polymer particles is 0.1 to 5.0 microns.

28. The coating composition of claim 19, wherein the fluorocarbon polymer comprises 30 to 99 percent by weight of the resin solids portion of the coating composition.

29. The coating composition of claim 19, wherein the solvent component is selected from the group consisting of aliphatic hydrocarbons, aromatic hydrocarbons, ketones, esters, glycols, ethers, ether-esters, glycol ethers, glycol

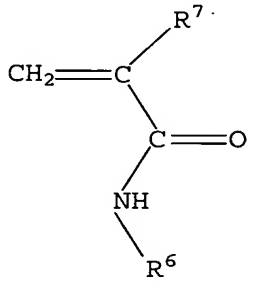
ether-esters, alcohols, ether-alcohols, phthalate plasticizers, and mixtures thereof.

30. The coating composition of claim 19, wherein the (meth)acrylate monomers are one or more selected from the group consisting of methyl(meth)acrylate, n-butyl(meth)acrylate, t-butyl(meth)acrylate, and ethyl(meth)acrylate.

31. The coating composition of claim 19, wherein the aminoalkyl(meth)acrylate monomer is an N-t-butyl, aminoalkyl (meth)acrylate.

32. The coating composition of claim 19 wherein the aminoalkyl(meth)acrylate monomer is t-butylaminoethyl methacrylate.

33. The coating composition of claim 19 wherein the polymer (a) comprises one or more additional monomers having the structure:



wherein R^7 is H or CH_3 and R^6 is $-CH_2-OH$ or $-CH_2-O-R^{10}$ where R^{10} is C_1-C_6 linear or branched aliphatic.

34. The coating composition of claim 33 wherein the additional monomers include one or more selected from the group consisting of N-butoxymethylol acrylamide, N-butoxymethylol methacrylamide, N-methylol acrylamide and N-methylol methacrylamide.

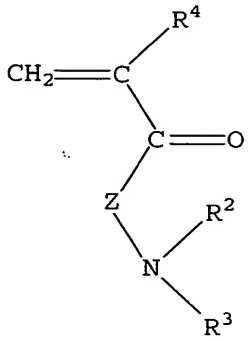
35. A coating composition comprising:

(a) a continuous phase comprising:

(i) 1 percent to 70 percent by weight based on resin solids of a polymer comprising the polymerized composition of:

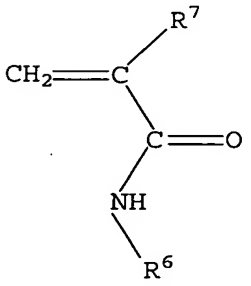
(A) 70 to 99.99 percent by weight, based on the weight of the polymer of one or more monomers selected from the group consisting of methyl(meth)acrylate, n-butyl(meth)acrylate, t-butyl(meth)acrylate, and ethyl(meth)acrylate;

(B) 0.01 to 10 percent by weight, based on the weight of the polymer of one or more aminoalkyl(meth)acrylate monomers described by the structure:



where Z is a divalent linking group; R^2 and R^3 are independently selected from H or C_1-C_6 linear or branched aliphatic; and R^4 is H or CH_3; and

(C) 0 to 20 percent by weight, based on the weight of the polymer of one or more additional monomers having the structure:



wherein R^7 is H or CH_3 and R^6 is $-CH_2-OH$ or $-CH_2-O-R^{10}$ where R^{10} is C_1-C_6 linear or branched aliphatic; wherein the sum of the amounts of (a), (b) and (c) is 100 percent and wherein the

weight-average molecular weight of the thermoplastic resin is from 7,000 to 20,000, as determined by gel permeation chromatography using polystyrene standards;

(ii) a solvent selected from the group consisting of aliphatic hydrocarbons, aromatic hydrocarbons, ketones, esters, glycols, ethers, ether-esters, glycol ethers, glycol ether-esters, alcohols, ether-alcohols, phthalate plasticizers and mixtures thereof; and

(b) 30 to 99 percent by weight based on resin solids of a dispersed phase comprising solid dispersible particles, ranging in size from 0.1 to 5.0 microns, of one or more fluorocarbon polymers selected from the group consisting of poly(vinylidene fluoride), poly(vinyl fluoride), poly(chlorotrifluoroethylene), poly(tetrafluoroethylene), and poly(trifluoroethylene).

36. The coating composition of claim 35, wherein Z is selected from $-O-R^1-$ and $-N(R^5)-R^1-$, wherein R^5 is H or C_1-C_6 linear or branched aliphatic, and R^1 is selected from the group consisting of or C_1-C_{20} linear or branched aliphatic, aryl, alkylaryl, ethoxylated alkyl, ethoxylated aryl, ethoxylated alkylaryl, propoxylated alkyl, propoxylated aryl, and propoxylated alkylaryl.

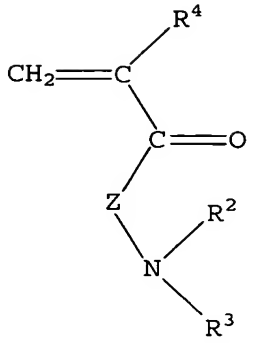
37. The coating composition of claim 35, wherein the polymer in (i) is a thermoplastic resin.

38. A method of coil coating to a metal substrate using a coil coating apparatus comprising:

A) applying a coating composition such that the wet film thickness is 1 to 10 mils, wherein the coating composition comprises:

(i) a continuous phase comprising:

(a) 1 to 70 percent by weight based on total resin solids of a polymer comprising one or more (meth)acrylate monomers and one or more aminoalkyl(meth) acrylate monomers described by the structure:



where Z is a divalent linking group; R^2 and R^3 are independently selected from H or C_1-C_6 linear or branched aliphatic; and R^4 is H or CH_3; and

(b) 25 - 50 percent by weight of a solvent based on the total weight of the coating composition;

(ii) 30 to 99 percent by weight based on total resin solids of a dispersed phase comprising solid dispersible particles of a fluorocarbon polymer; wherein the total resin solids are 50 - 75 percent by weight based on the total weight of the coating composition; and

B) curing at a temperature of 200°C to 300°C for 10 to 50 seconds to form a cured dry film with a film thickness of 0.5 to 6 mils.

39. The method of claim 38, wherein Z is selected from -O-R^1- and -N(R^5)-R^1-, wherein R^5 is H or C_1-C_6 linear or branched aliphatic, and R^1 is selected from the group consisting of or C_1-C_{20} linear or branched aliphatic, aryl, alkylaryl, ethoxylated alkyl, ethoxylated aryl, ethoxylated alkylaryl, propoxylated alkyl, propoxylated aryl, and propoxylated alkylaryl.

40. The method of claim 38, wherein the polymer (a) is a thermoplastic resin.

41. The method of claim 38, wherein the polymer comprises 10percent to 60 percent by weight of the resin solids portion of the coating composition.

42. The method claim 38, wherein the weight-average molecular weight of the polymer in (a) is from 7,000 to 20,000, as determined by gel permeation chromatography using polystyrene standards.

43. The method of claim 38, wherein the fluorocarbon polymer is one or more selected from the group consisting of poly(vinylidene fluoride), poly(vinyl fluoride), poly(chlorotrifluoroethylene), poly(tetrafluoroethylene), and poly(trifluoroethylene).

44. The method of claim 38, wherein the weight average molecular weight of the fluorocarbon polymer as determined by gel permeation chromatography using polystyrene standards is from 100,000 to 500,000.

45. The method claim 38, wherein the particle size of the dispersible fluorocarbon polymer particles is 0.1 to 5.0 microns.

46. The method of claim 38, wherein the fluorocarbon polymer comprises 40 to 90 percent by weight of the resin solids portion of the coating composition.

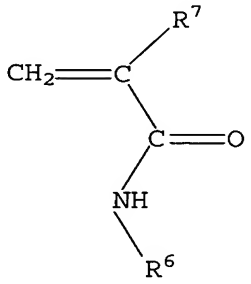
47. The method of claim 38, wherein the solvent component is selected from the group consisting of aliphatic hydrocarbons, aromatic hydrocarbons, ketones, esters, glycols, ethers, ether-esters, glycol ethers, glycol ether-esters, alcohols, ether-alcohols, phthalate plasticizers and mixtures thereof.

48. The method of claim 38, wherein the (meth)acrylate monomers are one or more selected from the group consisting of methyl(meth)acrylate, n-butyl(meth)acrylate, t-butyl(meth)acrylate, and ethyl(meth)acrylate.

49. The method of claim 38, wherein the aminoalkyl(meth)acrylate monomer is an N-t-butyl aminoalkyl (meth)acrylate.

50. The method of claim 38, wherein the aminoalkyl(meth)acrylate monomer is t-butylaminoethyl methacrylate.

51. The method of claim 38, wherein the polymer in (i) comprises one or more additional monomers having the structure:



wherein R^7 is H or CH_3 and R^6 is $-CH_2-OH$ or $-CH_2-O-R^{10}$ where R^{10} is C_1-C_6 linear or branched aliphatic.

52. The method of claim 51 wherein the additional monomers include one or more selected from the group consisting of N-butoxymethylol acrylamide, N-butoxymethylol methacrylamide, N-methylol acrylamide and N-methylol acrylamide.

53. A substrate coated using the method of claim 38.

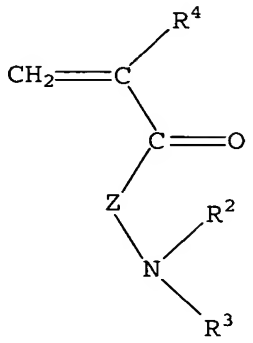
54. A method of spray coating a substrate using a spray coating apparatus comprising:

A) applying a coating composition such that the wet film thickness is 1 to 4 mils, wherein the coating composition comprises:

(i) a continuous phase comprising:

(a)) 1 to 70 percent by weight based on total resin solids of a polymer comprising one or more

(meth)acrylate monomers and one or more aminoalkyl(meth) acrylate monomers described by the structure:



where Z is a divalent linking group; R^2 and R^3 are independently selected from H or C_1-C_6 linear or branched aliphatic; and R^4 is H or CH_3; and

(b) 25 - 50 percent by weight of a solvent based on the total weight of the coating composition; and

(ii) 30 to 99 percent by weight based on total resin solids of a dispersed phase comprising solid dispersible particles of a fluorocarbon polymer; wherein the total resin solids are 50 - 75 percent by weight based on the total weight of the coating composition; and

B) curing at a temperature of 200°C to 300°C for 5 to 20 minutes to form a cured dry film with a film thickness of 0.3 to 2 mils.

55. The method of claim 54, wherein Z is selected from -O-R^1- and -N(R^5)-R^1-, wherein R^5 is H or C_1-C_6 linear or branched aliphatic, and R^1 is selected from the group consisting of or C_1-C_{20} linear or branched aliphatic, aryl, alkylaryl, ethoxylated alkyl, ethoxylated aryl, ethoxylated alkylaryl, propoxylated alkyl, propoxylated aryl, and propoxylated alkylaryl.

56. The method of claim 54, wherein the polymer in (a) is a thermoplastic resin.

57. The method of claim 54, wherein the polymer in (a) comprises 10 percent to 60 percent by weight of the resin solids portion of the coating composition.

58. The method of claim 54, wherein the weight-average molecular weight of the polymer in (a) is from 7,000 to 20,000, as determined by gel permeation chromatography using polystyrene standards.

59. The method of claim 54, wherein the fluorocarbon polymer is one or more selected from the group consisting of poly(vinylidene fluoride), poly(vinyl fluoride), poly(chlorotrifluoroethylene), poly(tetrafluoroethylene), and poly(trifluoroethylene).

60. The method of claim 54, wherein the weight average molecular weight of the fluorocarbon polymer as determined by gel permeation chromatography using polystyrene standards is from 100,000 to 500,000.

61. The method claim 54, wherein the particle size of the dispersible fluorocarbon polymer particles is 0.1 to 5.0 microns.

62. The method of claim 54, wherein the fluorocarbon polymer comprises 40 to 90 percent by weight of the resin solids portion of the coating composition.

63. The method of claim 54, wherein the solvent component is selected from the group consisting of aliphatic hydrocarbons, aromatic hydrocarbons, ketones, esters, glycols, ethers, ether-esters, glycol ethers, glycol ether-esters, alcohols, ether-alcohols, phthalate plasticizers, and mixtures thereof.

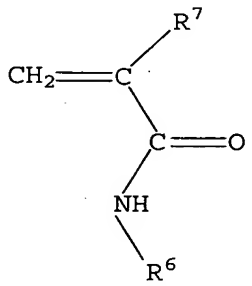
64. The method of claim 54, wherein the (meth)acrylate monomers are one or more selected from the group consisting of

methyl(meth)acrylate, n-butyl(meth)acrylate, t-butyl(meth)acrylate, and ethyl(meth)acrylate.

65. The method of claim 54, wherein the aminoalkyl(meth)acrylate monomer is an N-t-butyl aminoalkyl (meth)acrylate.

66. The method of claim 54, wherein the aminoalkyl(meth)acrylate monomer is t-butylaminoethyl methacrylate.

67. The method of claim 54, wherein the polymer in (a) comprises one or more additional monomers having the structure:



wherein R^7 is H or CH_3 and R^6 is $-CH_2-OH$ or $-CH_2-O-R^{10}$ where R^{10} is C_1-C_6 linear or branched aliphatic.

68. The method of claim 67 wherein the additional monomers include one or more selected from the group consisting of n-butoxymethylol acrylamide, n-butoxymethylol methacrylamide, N-methylol acrylamide, and N-methylol methacrylamide.

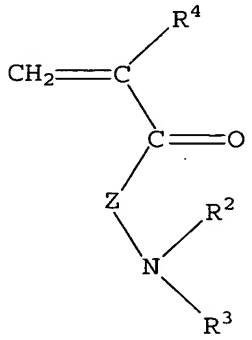
69. A substrate coated using the method of claim 54.

70. A method of extrusion coating a substrate using an extrusion coating apparatus comprising:

A) applying a coating composition such that the wet film thickness is 1 to 6 mils, wherein the coating composition comprises:

(i) a continuous phase comprising:

(a) 1 to 70 percent by weight based on total resin solids of a polymer comprising one or more (meth)acrylate monomers and one or more aminoalkyl(meth) acrylate monomers described by the structure:



where Z is a divalent linking group; R^2 and R^3 are independently selected from H or C_1-C_6 linear or branched aliphatic; and R^4 is H or CH_3; and

(b) 25 - 50 percent by weight of a solvent based on the total weight of the coating composition; and

(ii) 30 to 99 percent by weight based on total resin solids of a dispersed phase comprising solid dispersible particles of a fluorocarbon polymer; wherein the total resin solids are 50 - 75 percent by weight based on the total weight of the coating composition; and

B) curing at a temperature of 200°C to 500°C for 10 seconds to 20 minutes to form a cured dry film with a film thickness of 0.3 to 4 mils.

71. The method of claim 70, wherein Z is selected from -O-R^1- and -N(R^5)-R^1-, wherein R^5 is H or C_1-C_6 linear or branched aliphatic, and R^1 is selected from the group consisting of or C_1-C_{20} linear or branched aliphatic, aryl, alkylaryl, ethoxylated alkyl, ethoxylated aryl, ethoxylated alkylaryl, propoxylated alkyl, propoxylated aryl, and propoxylated alkylaryl.

72. The method of claim 70, wherein the polymer (a) is a thermoplastic resin.

73. The method of claim 70, wherein the polymer in (a) comprises 10 percent to 60 percent by weight of the resin solids portion of the coating composition.

74. The method of claim 70, wherein the weight-average molecular weight of the thermoplastic resin is from 7,000 to 20,000, as determined by gel permeation chromatography using polystyrene standards.

75. The method of claim 70, wherein the fluorocarbon polymer is one or more selected from the group consisting of poly(vinylidene fluoride), poly(vinyl fluoride), poly(chlorotrifluoroethylene), poly(tetrafluoroethylene), and poly(trifluoroethylene).

76. The method of claim 70, wherein the weight average molecular weight of the fluorocarbon polymer as determined by gel permeation chromatography using polystyrene standards is from 100,000 to 500,000.

77. The method claim 70, wherein the particle size of the dispersible fluorocarbon polymer particles is 0.1 to 5.0 microns.

78. The method of claim 70, wherein the fluorocarbon polymer comprises 40 to 90 percent by weight of the resin solids portion of the coating composition.

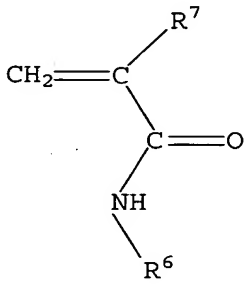
79. The method of claim 70, wherein the solvent component is selected from the group consisting of aliphatic hydrocarbons, aromatic hydrocarbons, ketones, esters, glycols, ethers, ether-esters, glycol ethers, glycol ether-esters, alcohols, ether-alcohols, phthalate plasticizers, and mixtures thereof.

80. The method of claim 70, wherein the (meth)acrylate monomers are one or more selected from the group consisting of methyl(meth)acrylate, n-butyl(meth)acrylate, t-butyl(meth)acrylate, and ethyl(meth)acrylate.

81. The method of claim 70, wherein the aminoalkyl(meth)acrylate monomer is an N-t-butyl aminoalkyl (meth)acrylate.

82. The method of claim 70, wherein the aminoalkyl(meth)acrylate monomer is t-butylaminoethyl methacrylate.

83. The method of claim 70, wherein the polymer in (a) comprises one or more additional monomers having the structure:



wherein R^7 is H or CH_3 and R^6 is $-CH_2-OH$ or $-CH_2-O-R^{10}$ where R^{10} is C_1-C_6 linear or branched aliphatic.

84. The method of claim 83 wherein the additional monomers include one or selected from the group consisting of n-butoxymethylol acrylamide, n-butoxymethylol methacrylamide, N-methylol acrylamide, and N-methylol methacrylamide.

85. A substrate coated using the method of claim 70.